Job Aid Replacing the Avaya S8500 Media Server—Release 2.0 and Later

This job aid describes the steps required to replace an Avaya S8500 Media Server running Release 2.0 and later of Communication Manager. You should replace the media server only to correct a problem, such as a functional failure of the motherboard, the hard drive, or other components.

The hard drive in the replacement media server comes blank. If you are using this blank hard drive, you must install the software from the CD-ROM that the customer received from an earlier installation of Release 2.x software. The software CD-ROM contains the Linux operating system and the appropriate release of Avaya Communication Manager.

If the hard drive in the failed media server is good, you can replace the blank hard drive in the replacement media server with the old hard drive.

Required Equipment

Verify that you have the following equipment and tools on site:

- Replacement S8500 Media Server
- CD-ROM with the software load (from the customer) if not reusing the hard drive
- Ethernet crossover cable for direct connection of your laptop to the media servers
- Flat-head screwdriver
- Cross-point (Phillips) screwdriver
- Electrostatic wrist ground strap and mat
- Paper clip

Pre-site tasks

Before you go on site, verify that the following tasks are done.

- Ask the customer for the Product ID for the media server being replaced. If the customer does not have it, run the Automatic Registration Tool (ART) to obtain the Product ID number and port number (customer dial-up) for the replacement media server.
- If the customer is using SNMP for alarming, you will need to get the IP addresses and community names from the customer because the SNMP programming is not saved after the replacement.

- If using the blank hard drive that comes with the media server, verify that you have the correct software and software update (patch). You must install the software on the replacement media server, and you may need to install a software update (patch).
- If using the blank hard drive that comes with the media server, verify that you have the current license and Avaya authentication files to install on the replacement media server. Go to the Remote Feature Activation (RFA) Web site to get them (http://rfa.avaya.com).
- Verify that the customer has a recent backup of all the system and translation files. This is critical if the hard drive is not functional.
- Verify with the customer that you have access permissions to backup and restore the data from the network server.

Checklist 1. Pre-site tasks for replacing an S8500 Media Server

✓		Task	Description
	1	Obtain CD with the correct software release	Retrieve from the customer a CD containing Release 2.x of Communication Manager.
	2	Get software update (patch), if appropriate	The Communication Manager software update (patch) file may be available on the CD. Otherwise, download it to your laptop from the Avaya Support Web site (http//www.avaya.com/support). Select **Software & Firmware Downloads** > **S8700 Media Server** > **Software Download**.
	3	Get all configuration information for the media server, for example, IP addresses, server name, DNS information, and so forth	

Media server considerations

If the hard drive in the failed media server is good, go to Table 2, Initial tasks for replacing an S8500 Media Server reusing the original hard drive, on page 3.

If the hard drive is not functional, make sure the customer has a recent backup of the system files and translations that you can restore after you have replaced the hard drive. If not, the media server needs to be reconfigured and translations input as if it were a new installation. See *Installing and Configuring the Avaya S8500 Media Server* (03-300143) for detailed procedures. Additionally, some illustrations of software installation and configuration information appear later in this document.

Except where noted in the following checklist, see *Upgrading Software and Firmware— Avaya S8500 Media Server* (555-245-111) on the *Avaya S8300, S8500, and S8700 Media Server Library* CD-ROM, 555-233-825, Issue 1, for details on the tasks.

Checklist 2. Initial tasks for replacing an S8500 Media Server reusing the original hard drive

✓		Task	Description
	1	Log onto Maintenance Web Interface	Connect a crossover cable to the services port on the back of the media server. Open a browser on your laptop. Type **192.11.13.6** and press **Enter** to log onto the Maintenance Web Interface as **craft** or **dadmin**.
	2	Determine the software release and any software updates (patches)	Under Server, click **Software Version**. Note the software release and any installed software updates (patches).
	3	Determine if the customer has a recent backup of data	On the Maintenance Web Interface under Data Backup/Restore, select **Backup Logs** to search for recent backup files. Check for the types of data and dates. Verify that there is a recent, successful backup of the system files and translations.
	4	Record alarms and verify hard drive functionality	Under Alarms, click **Current Alarms**. Note alarms on the media server not related to the hard drive. In the Server alarms section, check the Source Listing column for a HARD DISK entry. If it is there, then the hard drive is failing and cannot be reused.
	5	Back up the system files	If the customer does not have a recent backup, you must back up the files so they can be restored later. Under Data Backup/Restore, click **Backup Now**. Select "Server and System Files," "Security Files,""Avaya Call Processing (ACP) Translations," and "Save ACP translations prior to backup." Select the backup method normally used. Click **Start Backup** to begin the back up process.
	6	Record the OSSI numbers (used when the system dials out to report alarms)	If the customer does not have these numbers, open a Telnet session by typing **telnet** and press **Enter**. Type **almenable** and press **Enter**. Record the numbers. Type **exit** and press **Enter** to close Telnet session.
	7	Suppress alarm origination	Use telnet to access the Linux command line. Type **almsuppress -t 120** and press **Enter** to suppress alarms for the duration of the replacement process. (Maximum time is 2 hours.)
	8	Unplug the media server	Unplug the power cord from the back of the media server.
	9	Unplug the RSA	Unplug the power cord from the RSA.
	10	Disconnect the modem	Disconnect the modem from the RS-232 port on the RSA.

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Checklist 2. Initial tasks for replacing an S8500 Media Server reusing the original hard drive

✓		Task	Description
	11	Disconnect the LAN connection from the RSA	Disconnect and label the LAN connection (if used) from the Ethernet port on the RSA.
	12	Disconnect the cable from the dual NIC (if used)	Disconnect and label the cable from the Ethernet port on the dual NIC (if used).
	13	Disconnect the crossover cable	Disconnect the crossover cable from the services port on the back of the media server.

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Tasks to replace an S8500 Media Server

Checklist 3. Tasks for replacing an S8500 Media Server

✓		Task	Description
	1	Shut down the media server	If the hard drive is functional, under Server, click **Shutdown This Server** then unclick Restart Server after Shutdown. Press the power-control button on the front of the server. The internal fan shuts off. **Caution**: Do not unplug a functioning server without stopping all processes first. Failure to do this corrupts the hard drive. This is especially important if reusing the hard drive. **Caution**: Do not hold down the power button for more than a split second. Holding the button down too long causes the media server to reboot.
	2	Unplug the media server	Once the media server is completely shut down, unplug the power cords from the media server and RSA. **Caution**: Do not unplug a functioning server without stopping all processes first. Failure to do this corrupts the hard drive. This is especially important if reusing the hard drive. Disconnect and label the LAN connections from the Ethernet ports on the RSA and dual NIC (if used) Disconnect all attached devices, including the laptop, both modems, and the external flashcard reader (if used).
	3	Remove the media server from the rack	See Removing the S8500 Media Server from the rack on page 12
	4	Remove the cover of the media server	See Removing the cover of the media server on page 13.

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Checklist 3. Tasks for replacing an S8500 Media Server

✓		Task	Description
	5	Replace components in the replacement media server	You need to replace the RSA in the replacement media server with the original one from the failed media server. See Reusing the Remote Supervisor Adapter on page 16 If the failed media server has the optional dual NIC, you must move it to the replacement media server. See Reusing the optional network interface card, if being used on page 18. If the hard drive in the failed media server is good, you must replace the one in the replacement media server with the original one from the failed media server. See Reusing the hard drive on page 14.
	6	Replace the cover of the replacement media server	See Replacing the cover on the replacement media server on page 20.
	7	Install the replacement media server into the rack	See Installing the replacement media server in the rack on page 20
	8	**Note**: Skip this step if reusing the original hard drive. Insert the software CD in the CD-ROM drive of the media server, if using the blank hard drive	Use an end on the paper clip to push the button to open the CD-ROM drawer. Place the Communication Manager CD in the drawer and close it. The software CD contains boot software that the media server automatically accesses when you power up the media server.
	9	Power up the media server.	Plug the power cords into the media server and RSA. Press the power-control button on the front of the media server. **Note:** Wait at least 3 minutes for the media server to complete its power up. Watch the power-on LED on the media server.
	10	Reconnect attached devices	Reconnect the LAN connections to the Ethernet ports on the RSA and dual NIC (if used). Reconnect all attached devices, including the laptop, both modems, and the external flashcard reader (if used).
	11	**Note**: Skip this step if using a new hard drive. Test the hard drive by logging onto the Maintenance Web Interface.	Connect a crossover cable to the services port on the back of the media server. Open a browser on your laptop. Type **192.11.13.6** and press **Enter** to log onto the Maintenance Web Interface as craft or dadmin. Log in as **craft** or **dadmin**. Under Server, click **Status Summary** and note the information concerning the hard drive.
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Determining if a hard drive is functional

There are occasions when the defective media server may have a functional hard drive. To determine if the hard drive in the defective media server is functional:

1 On the defective media server, connect the laptop cross-over cable to the Ethernet RJ45 port on the RSA card (see Figure 1, Connector panel on the Remote Supervisor Adapter, on page 6 for locations of the connectors and components of the RSA).

Figure 1: Connector panel on the Remote Supervisor Adapter

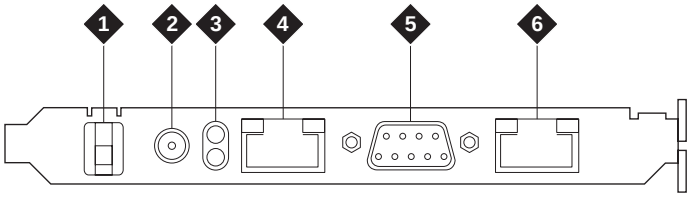


Figure notes

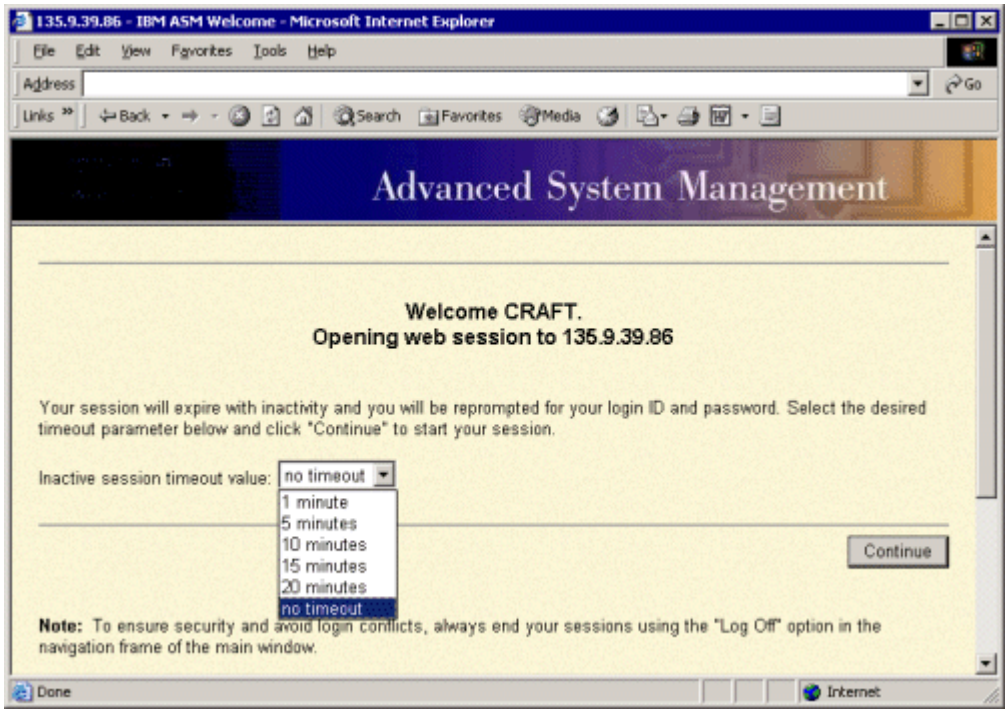
1	Clip	**4**	ASM RS-485 RJ14 connector
2	External power-supply connector	**5**	Serial connector
3	Power and error LEDs	**6**	Ethernet RJ45 connector

2 Open a web browser to the RSA card and in the **Address** field, type **192.11.13.6** and press **Enter**.

The system displays the ***Enter Network Password*** window.

3 In the ***Enter Network Password*** window, in the **User Name** field, type *craft* and in the **Password** field, type the current password obtained during training and press **Enter**.

The system displays the ***Welcome*** window.


135.9.39.86 - IBM ASM Welcome - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address
Go
Links
Back
Search
Favorites
Media
Advanced System Management
Welcome CRAFT.
Opening web session to 135.9.39.86
Your session will expire with inactivity and you will be reprompted for your login ID and password. Select the desired timeout parameter below and click "Continue" to start your session.
Inactive session timeout value:
no timeout
1 minute
5 minutes
10 minutes
15 minutes
20 minutes
no timeout
Continue
Note: To ensure security and avoid login conflicts, always end your sessions using the "Log Off" option in the navigation frame of the main window.
Done
Internet

4 On the ***Welcome*** window, click **Continue**.

5 On the navigation pane, click **Event Log**.

6. On the ***Event Log*** window, look for red boxes in the **Sev**(erity) column. This indicates problems that need attention. A fatal server failure should be near the top of the Event Log.

   If there is no mention of a hard drive failure, you can presume the hard drive is operational and can be moved to the replacement media server.

7. Remove the defective media server. See Removing the S8500 Media Server from the rack on page 12.

8. Remove the hard drive from the defective media server. See Removing the hard drive from the failed media server on page 14.

9. Remove the hard drive from the replacement media server. See Removing the hard drive from the replacement media server on page 15.

10. Install the hard drive from the replacement media server. See Installing the original hard drive in the replacement media server on page 16.

11. Install the replacement media server. See Installing the replacement media server in the rack on page 20.

12. Connect the laptop cross-over cable to the Ethernet RJ45 port on the RSA card.

13. On the media server, press **Power** and wait for the operating system to come up.

14. Open a web browser to the RSA card and in the **Address** field, type **192.11.13.6** and press **Enter**.

15. In the ***Enter Network Password*** window, in the **User Name** field, type *craft* and in the **Password** field, type the default password and press **Enter**.

    This RSA card is new to the S8500 Media Server and has not been configured for the customer.

16. On the ***Welcome*** window, click **Continue**.

17. On the navigation pane, click **System Health**.

18. On the **System Health Summary** section, monitor the **Server State** field until it changes to "OS booted." Verify "Server is operating normally" is green.

    Periodically refresh the screen by clicking **System Health** on the navigation pane.

    If the "Server is operating normally" changes from green to red before the **Server State** field says "OS booted," click **Event Log**.

Final tasks

If you are reusing the old hard drive, follow the procedure in Final tasks for replacing an S8500 Media Server reusing the original hard drive on page 11.

If not reusing the old hard drive, you must install the Linux operating system and Avaya Communication Manager on the blank hard drive, then restore the backed up system files to the media server. Follow the procedure in Final tasks for replacing an S8500 Media Server using the blank hard drive on page 8

NOTE:
If at any time you cannot log into the media server or RSA card, clear the ARP cache.

Checklist 4. Final tasks for replacing an S8500 Media Server using the blank hard drive

✓		Task	Description
	1	Disconnect the RJ45 cable	Disconnect the Ethernet RJ45 crossover cable from the Services port on the media server.
	2	Clear ARP cache on laptop if you cannot log in	From a DOS command line, type **arp -d 192.11.13.6** and press **Enter**.
	3	Connect laptop to the RSA card	Connect to the Ethernet port (to the right of the serial connector) on the back of the RSA card using a crossover cable.
	4	Log into the RSA card	Open a browser on your laptop. Type **192.11.13.6** and press **Enter** to log into the RSA. **Note:** Use the initial installation craft login and the initial RSA password.
	5	Set a timeout value	On the RSA welcome screen, on the **Inactive session timeout value** field, select **no timeout** and click **Continue**. This allows 60 minutes of use before disconnecting.
	6	Set the loader watchdog timeout	Under ASM Control, click **System Settings**. Scroll down to the Server Timeouts section, and in the **Loader watchdog** field, select **disabled** and click **Save**.
	7	Log off the RSA	Click **Log Off**.
	8	Move the RSA LAN cable	Disconnect the Ethernet RJ45 cable from the RSA Ethernet port.
	9	Connect laptop to the media server	Connect a crossover cable to the services port on the back of the media server and wait about 3 minutes from the time you boot up the server before trying to access the information on the CD.
	10	Clear ARP cache on laptop	From a DOS command line, type **arp -d 192.11.13.6** and press **Enter**.
	11	Set Telnet parameters (if necessary)	Use telnet to access the Linux command line. Type **telnet 192.11.13.6** and press **Enter**. Type **unset crlf** and press **Enter**. Type **display** and press **Enter** to verify that message says `Sending only CR` Type **exit** and press **Enter** to close Telnet session.
	12	Install Communication Manager	You must install the software from the CD. For procedure details, see Installing the software on page 22.
	13	Log onto the Maintenance Web Interface	Open a browser on your laptop. Type **192.11.13.6** and press **Enter** to log onto the Maintenance Web Interface. Log in as **craft** or **dadmin**. **Note:** Use the initial installation login **craft** and the initial password.
	14	Set alarm suppression on the media server	Using Telnet on the Linux command prompt screen, type **almsuppress -y** and press **Enter** to enable alarm suppression.

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Checklist 4. Final tasks for replacing an S8500 Media Server using the blank hard drive

✓		Task	Description
	15	Check software version on the Maintenance Web page	Under Server, click **Software Version** to verify that the hard drive has the current release of Communication Manager.
	16	Copy files to the media server	Copy the license and Avaya authentication files and the software update (patch) file, if any, to the media server. Under Miscellaneous, click **Download Files**. Browse to select the file for downloading and click **Download**.
	17	Configure the network parameters and verify connectivity (optional)	You must readminister the Ethernet port connecting to the customer's network. Under Server Configuration, click **Configure Server** and click **Continue**. Click Continue through the pages until you get to the ***Specify how you want to use this wizard*** page. Select "Configure individual services" and click **Continue**. Fill in the correct IP address, Gateway, and Subnet mask (or use the default addresses) for the Ethernet port (Eth0) and select AUTOSENSE for the speed and click **Change**. Close the window. Under Diagnostics, click **Ping**. Type the IP address of the server where the files are backed up and click **Execute Ping** to verify that you can access the customer's network.
	18	Restore the system files and translations	Under Servers, click **Software Version**. Note the Release String data. Under Data Backup/Restore, click **View/Restore Data**. **Caution**: Do not restore files if they are from a software load different from the load now running on the media server; for example, if the software load of the backed-up files was S8x00-02.0-00.0.219.0 and the media server is now running load S8x00-02.0-00.0.219.1. Match the Release String data from the Software Version page with the listing provided. For procedure details, see Restoring the system files on page 25.
		If there were no backup files, configure the media server	See *Installing and Configuring the Avaya S8500 Media Server*, 03-300143.
	19	Verify date and time	Under Server, click **Server Date/Time**. Make changes as necessary.
	20	Install software update (patch), if any	You may need to install a software update (patch). For procedure details, see Installing post-upgrade update (patch) files (if any) on page 24. **Note**: Skip this procedure if there is no software update (patch) file to install.

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Checklist 4. Final tasks for replacing an S8500 Media Server using the blank hard drive

✓		Task	Description
	21	Verify that the update (patch) is installed	Under Server, click **Software Version** to verify the software update (patch) versions.
	22	Verify media server configuration	For procedure details, see Verify media server configuration on page 26 **Note**: If there was no backup file to restore, you need to reconfigure the media server. Get the configuration data from the customer.
	23	Install the license and Avaya authentication files	Under Security, click **License File** and select "Install the license I previously downloaded" and click **Submit**. Click **Avaya Authentication** and click **Submit**.
	24	Copy translations	Using a SAT screen, type **reset system 4** to copy translations to disk.
	25	Log in from the SAT	Type **telnet 192.11.13.6 50.23** and press **Enter**.
	26	Check the translations	Using the SAT screen, type **list configuration all** and press **Enter** and check that all the hardware displays.
	27	Test the hard drive by logging onto the Maintenance Web Interface	Connect a crossover cable to the services port on the back of the media server. Open a browser on your laptop. Type **192.11.13.6** and press **Enter** to log onto the Maintenance Web Interface as **craft** or **dadmin**. Under Server, click **Status Summary** and note the information concerning the hard drive.
	28	Ping the connections on the media server	Under Diagnostics, click **Ping**. Ensure that all connections, IPSI boards, and all administered connections respond.
	29	Resolve alarms on the media server	Under Alarms, click **Current Alarms**. Compare these against the recorded alarms from Checklist 2, step 4. Clear any alarms that appear. Using a SAT screen, type **display alarms** and press **Enter**. For instructions on resolving alarms, see *Maintenance Alarms Reference*, 555-245-102.
	30	Check the health of the media server	Using a SAT screen, type **list ipserver-interface** and **status health**. Check that all connections are working correctly.
	31	Save translations	Using a SAT screen, type **save translation** and press **Enter** to back them up.
	32	Administer backup schedule on the media server	Under Data Backup/Restore, click **Schedule Backup** to readminister the media server's backup schedule.
	33	Back up files on the media server	Under Data Backup/Restore, click **Backup Now**. Click **Start Backup** to begin the back up process.

Checklist 4. Final tasks for replacing an S8500 Media Server using the blank hard drive

✓		Task	Description
	34	Set the Product ID on the media server	Type **productid -p *product_id*** and press **Enter**, where ***product_id*** is the product ID you received from the customer or the ART tool. It should be the same product ID as the old hard drive.
	35	Release alarm suppression on the media server	Using telnet on the Linux command prompt screen, type **almsuppress -n** and press **Enter** to release alarm suppression. **Note**: Only do this if you want to release it before the time you set earlier runs out (maximum of 2 hours)
	36	Log off all administration applications	When you have completed all the administration, log off the media server.
	37	Disconnect from the media server	Disconnect the laptop from the media server.
	38	Clear ARP cache on laptop if you cannot log in	From a DOS command line, type **arp -d 192.11.13.6** and press **Enter**.
	39	Connect laptop to the RSA card	Connect to the Ethernet port (to the right of the serial connector) on the back of the RSA card using a crossover cable.
	40	Log into the RSA card	Open a browser on your laptop. Type **192.11.13.6** and press **Enter** to log into the RSA. **Note:** Use the initial installation craft login and the initial RSA password.
	41	Set a timeout value	On the RSA welcome screen, on the **Inactive session timeout value** field, select **no timeout** and click **Continue**. This allows 60 minutes of inactivity before disconnecting.
	42	Set the loader watchdog timeout	Under ASM Control, click **System Settings**. Scroll down to the Server Timeouts section, and in the **Loader watchdog** field, select **5.0** (minutes) and click **Save**.
	43	Log off and disconnect from the RSA	Click **Log Off**. Once you are logged off, disconnect from the services port on the RSA.

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Checklist 5. Final tasks for replacing an S8500 Media Server reusing the original hard drive

✓		Task	Description
	1	Connect laptop to the media server	Connect to the services port on the back of the media server and wait about 3 minutes before logging in.
	2	Log onto the Maintenance Web Interface	Open a browser on your laptop. Type **192.11.13.6** and press **Enter** to log onto the Maintenance Web Interface. **Note:** Use the initial installation login **craft** or **dadmin** and the initial password.
	3	Verify date and time	Under Server, click **Server Date/Time**. Make changes as necessary.

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Checklist 5. Final tasks for replacing an S8500 Media Server reusing the original hard drive

✓		Task	Description
	4	Ping the connections on the media server	Under Diagnostics, click **Ping**. Ensure that all administered connections respond.
	5	Resolve alarms on the media server	Under Alarms, click **Current Alarms**. Compare these against the recorded alarms from Checklist 3, step 2. Clear any alarms that appear. Using a SAT screen, type **display alarms** and press **Enter**. For instructions on resolving alarms, see *Maintenance Alarms Reference*, 555-245-102.
	6	Check the health of the media server	Using a SAT screen, type **list ipserver-interface** and **status health**. Check that all connections are working correctly.
	7	Set the Product ID on the media server	Type **productid -p *product_id*** and press **Enter**, where ***product_id*** is the product ID you received from the customer or the ART tool. It should be the same product ID as the old hard drive.
	8	Release alarm suppression on the media server	Using telnet on the Linux command prompt screen, type **almsuppress -n** and press **Enter** to release alarm suppression. **Note**: Only do this if you want to release it before the time you set earlier runs out (maximum of 2 hours)
	9	Log off all administration applications	When you have completed all the administration, log off the media server.

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Replacing the S8500 Media Server

When replacing a failed S8500 Media server, there may be several components that can be reused. These include the hard drive, Remote Supervisor Adapter (RSA), and Network interface card (NIC), if being used. If these components are serviceable, we recommend that you remove them from the failed media server and install them in the replacement media server. For specific removing and replacing information see

- Reusing the hard drive on page 14
- Reusing the Remote Supervisor Adapter on page 16
- Reusing the optional network interface card, if being used on page 18

Removing the S8500 Media Server from the rack

1. Pull the media server forward so the server rails expand and the retaining clips on the rails click into place.
2. Using the cross-point (Phillips) screwdriver, remove the media server from the slide rails in the rack.

Removing the cover of the media server

For these steps see Figure 2, Removing and replacing the cover on the S8500 Media Server, on page 13.

1. Set the media server down on a flat surface with an electrostatic mat.
2. Loosen the two captive screws on the back of the media server that hold the top in place.
3. Slide the media server cover back from the front panel until the cover's tabs are released from the top slot of the front panel.
4. Lift the cover straight up and remove it from the media server.

Figure 2: Removing and replacing the cover on the S8500 Media Server

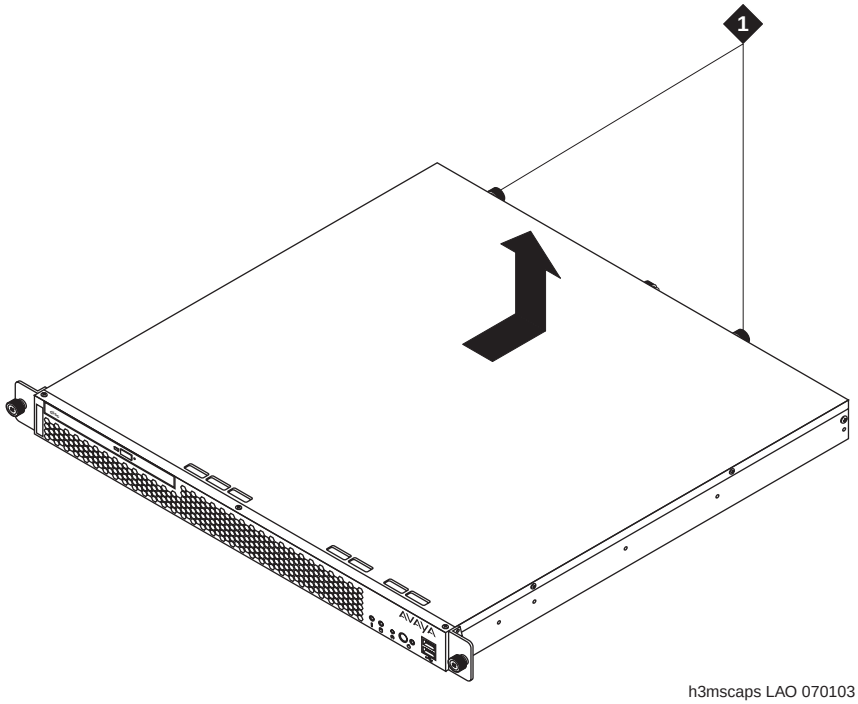


Figure notes

1. Captive screws on media server holding cover in place

Reusing the hard drive

If the hard drive in the failed media server is still good, then you want to reuse it in the replacement media server. Use the following process to switch the hard drives.

- Removing the hard drive from the failed media server on page 14
- Removing the hard drive from the replacement media server on page 15
- Installing the original hard drive in the replacement media server on page 16

CAUTION:
Wear an anti-static wrist ground strap whenever handling components such as the hard drive of an Avaya S8500 Media Server. Connect the strap to an approved ground, such as an unpainted metal surface. Also, place the hard drive on an anti-static mat that is similarly grounded. Do not place the new or the old drive on a bare surface.

Removing the hard drive from the failed media server

For these steps, see Figure 3, Removing and replacing the drive cage, on page 15.

1. Locate the drive cage in the left-hand corner of the front of the media server.
2. Use the two black pull handles on the ribbon cables to unplug the data connectors from the back of the CD-ROM and hard drive.
3. Push the ribbon cable back out of the way.
4. Unplug the two power connectors from the back of the CD-ROM drive and the hard drive. You must release the power connector on the CD-ROM drive by gently bending the side spring clip holding it in place.
5. Loosen the captive screw next to the drive cage.
6. Slide the drive cage toward the back of the media server to clear the retaining hooks.
7. Place the drive cage on the antistatic mat.
8. Remove the four screws (two on each side) securing the hard drive in the drive cage and remove the hard drive.

Figure 3: Removing and replacing the drive cage

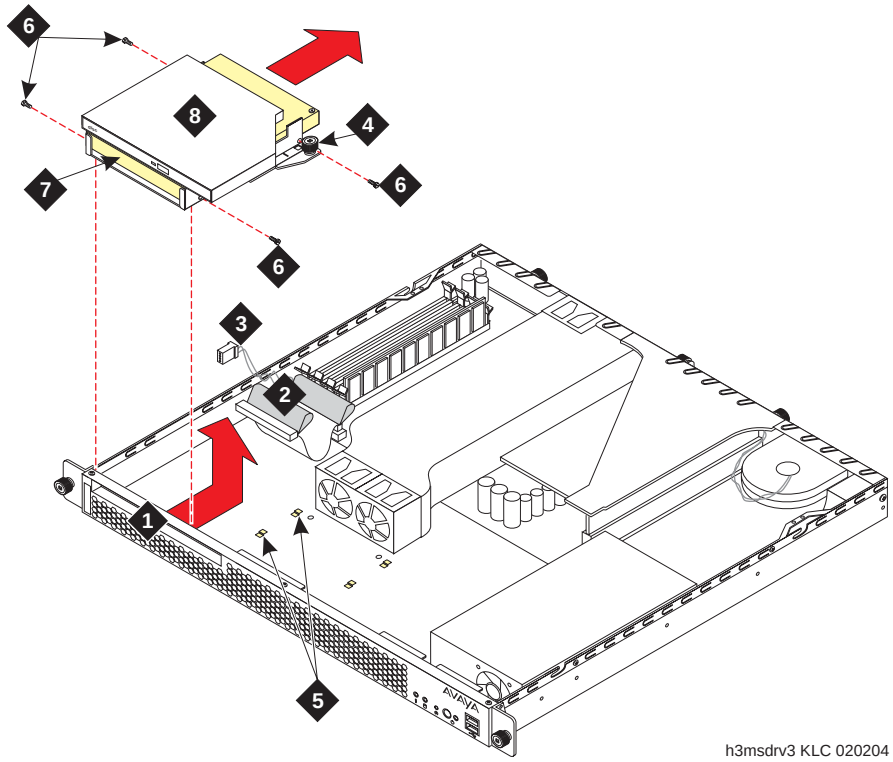


Figure notes

1	Drive bay housing drive cage	**5**	Tabs
2	Ribbon cable attached to hard drive	**6**	Screws holding hard drive in drive cage
3	Power cable connected to the CD-ROM drive	**7**	Hard drive
4	Captive screw holding drive cage	**8**	Drive cage

Removing the hard drive from the replacement media server

1. Remove the cover from the replacement media server. See Removing the hard drive from the failed media server on page 14.
2. Remove the hard drive from the replacement media server. See Removing the hard drive from the failed media server on page 14.

Installing the original hard drive in the replacement media server

For these steps, see Figure 3, Removing and replacing the drive cage, on page 15.

1. Insert the original hard drive into the drive cage so that the connectors are in the same direction as the CD-ROM connectors and the screw holes are aligned.
2. Reinsert the 4 screws (2 on each side) to attach the hard drive to the drive cage.
3. Reattach the flat ribbon cable (in 2 places) to the hard drive and CD-ROM drive.
4. Reattach the 2 power cables to the hard drive and CD-ROM drive.
5. Slide the drive cage into place in the media server, making sure that it fits securely into the retaining hooks and finger-tighten the captive screw.
6. Make sure the drive cage is secure and that the cables are not bunched or blocking the fan unit.

Reusing the Remote Supervisor Adapter

If the RSA card in the failed media server is still good, then you want to reuse it in the replacement media server. Use the following process to switch the RSAs.

- Removing the Remote Supervisor Adapter from the failed media server on page 16
- Removing the Remote Supervisor Adapter from the replacement media server on page 17
- Installing the original Remote Supervisor Adapter in the replacement media server on page 18

CAUTION:
Wear an anti-static wrist ground strap whenever handling components such as the hard drive of an Avaya S8500 Media Server. Connect the strap to an approved ground, such as an unpainted metal surface. Also, place the hard drive on an anti-static mat that is similarly grounded. Do not place the new or the old drive on a bare surface.

Removing the Remote Supervisor Adapter from the failed media server

1. Remove the cover of the media server. See Removing the cover of the media server on page 13.
2. Remove one side of the ribbon cable from the system-management connector on the system board (CN-12) and the other side from the system-management connector on the RSA.

   NOTE:
   The RSA card resides in PCI-X slot 1 located under the adapter support bracket. Remove the adapter support bracket and the riser connector together.

3. Loosen the captive screw located to the right of the slot labeled PCI 1.
4. The riser connector must be removed by pulling straight up on the adapter support bracket. Place one finger under the screw on the far end of the riser connector and one finger under the adapter support bracket near the captive screw and pull straight up, as shown in Figure 4, Removing and replacing the Remote Supervisor Adapter, on page 17.

Figure 4: Removing and replacing the Remote Supervisor Adapter

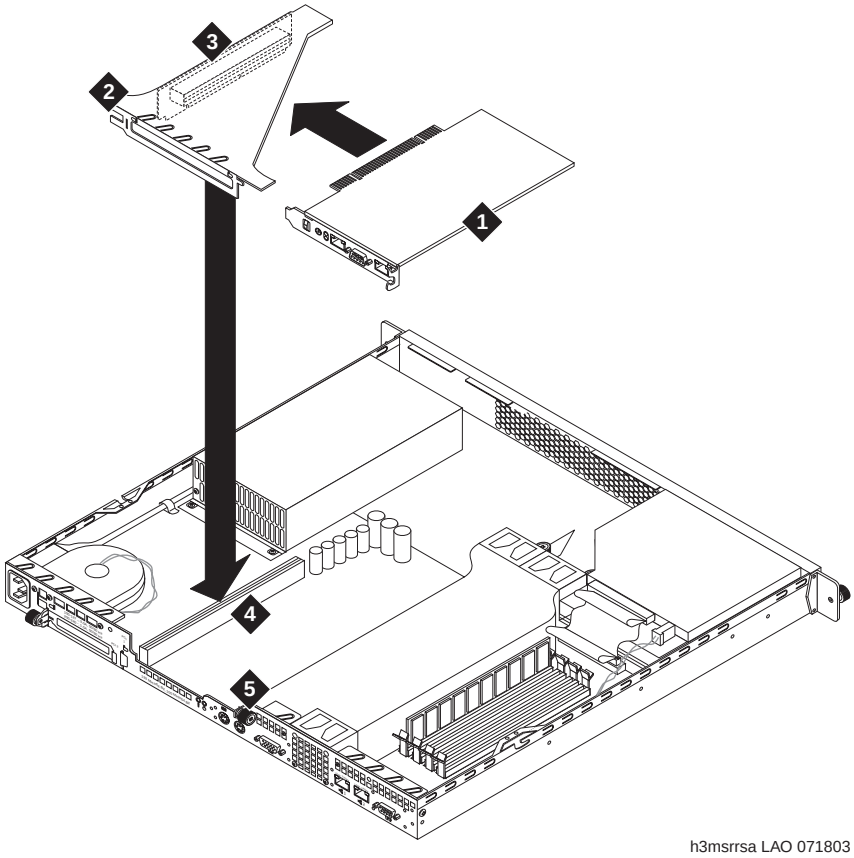


Figure notes

1	Remote Supervisor Adapter	**4**	Connector
2	Adapter support bracket	**5**	Captive screw
3	Riser card connector		

5 Remove the RSA card from PCI-X slot 1 by pulling the card gently out of the riser card connector.

Removing the Remote Supervisor Adapter from the replacement media server

1 Remove the cover of the media server. See Removing the cover of the media server on page 13.

2 Remove the RSA from the replacement media server. See Removing the Remote Supervisor Adapter from the failed media server on page 16

Installing the original Remote Supervisor Adapter in the replacement media server

1. Carefully grasp the original RSA by the top edges or upper corners, component side facing up, and align it with the PCI-X slot 1 opening. Press the RSA firmly into the riser card connector. See Figure 4, Removing and replacing the Remote Supervisor Adapter, on page 17.

   CAUTION:
   Make sure the RSA card is completely and correctly seated in the riser card connector before you turn on the S8500 Media Server. Incomplete insertion might cause damage to the system board or RSA card.

2. Connect the ribbon cable to the system-management connector located on the back of the card.
3. Replace the adapter support bracket lining up the tabs on each side of the bracket and the screw holes on the riser card connector.
4. Align the riser card with the connector and the tabs on the adapter support bracket with the provided holes and press the riser card firmly into the connector.
5. Finger-tighten the captive screw to the right of the slot.
6. Place the cover onto the media server. See Replacing the cover on the replacement media server on page 20.

Reusing the optional network interface card, if being used

If the optional NIC in the failed media server is being used and still good, then you want to reuse it in the replacement media server. Use the following process to switch the NIC.

- Removing the Remote Supervisor Adapter from the failed media server on page 16
- Installing the original Remote Supervisor Adapter in the replacement media server on page 18

CAUTION:
Wear an anti-static wrist ground strap whenever handling components such as the hard drive of an Avaya S8500 Media Server. Connect the strap to an approved ground, such as an unpainted metal surface. Also, place the hard drive on an anti-static mat that is similarly grounded. Do not place the new or the old drive on a bare surface.

Removing the network interface card from the failed media server

For these steps, see Figure 5, Removing and replacing the network interface card, on page 19.

1. Locate the fan slot adjacent to the power plug on the rear of the media server.
2. Remove the two screws holding the fan unit. You do not need to unplug the fan unit.
3. Set the adapter-support bracket to the right of the fan.
4. Completely unscrew the captive screw on the left-hand side of the PCI-2 slot.

   The captive screw is now loose so that you can flip it up. You will need this space to maneuver the NIC out of its slot.
5. Firmly pull the card out of its slot.

Figure 5: Removing and replacing the network interface card

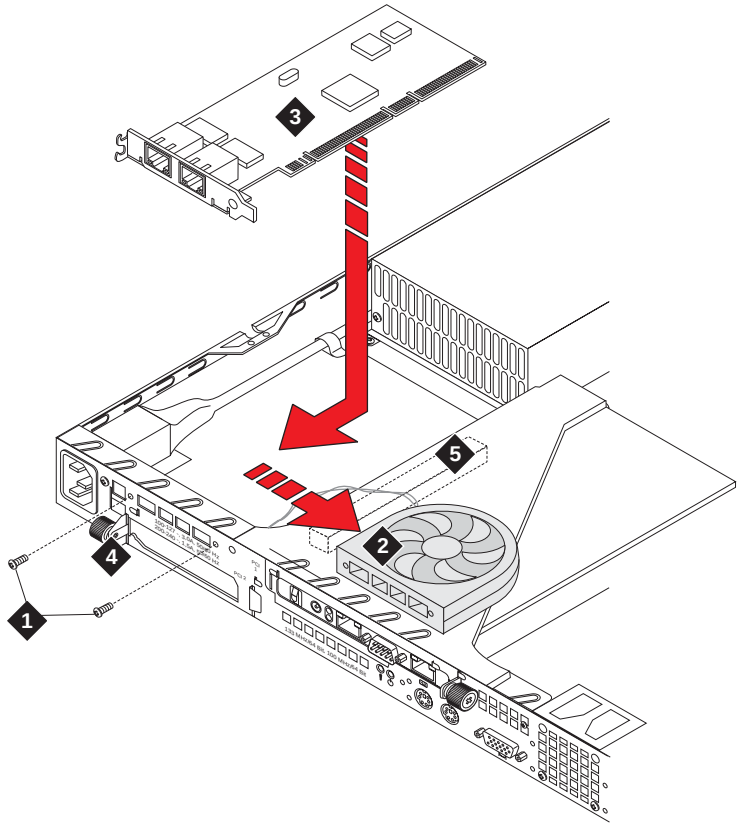


Figure notes

1	Mounting screws	**4**	Captive screw
2	Fan assembly	**5**	Network Interface Card expansion slot
3	Network Interface Card (NIC)		

Installing the network interface card in the replacement media server

For these steps, see Figure 5, Removing and replacing the network interface card, on page 19.

1 Carefully grasp the NIC by the top edge or upper corners and align it with the PCI-2 expansion slot. Press the NIC firmly into the expansion slot.

CAUTION:
Make sure that the NIC is completely and correctly seated in the PCI-2 expansion slot of the S8500 Media Server. Incomplete insertion might cause damage to the system board or the NIC.

2 Position the faceplate so that it fits in the PCI-2 slot using the captive screw to hold it in place.

3 Replace the fan unit with the fan blades pointed down toward the NIC, securing the fan unit with the original two screws.

Replacing the cover on the replacement media server

For these steps, see Figure 2, Removing and replacing the cover on the S8500 Media Server, on page 13.

1. Place the cover onto the media server.
2. Slide the cover forward so the covers' tabs slide into place under the top slots of the front panel.
3. Finger-tighten the captive screws on the back of the server.

Installing the replacement media server in the rack

1. Install the media server onto the slide rails in the rack.
2. Push back into place.
3. Return to step 8 in Tasks for replacing an S8500 Media Server on page 4 to continue with the listed tasks.

See *Quick Start for Hardware Installation: Avaya S8500 Media Server* for information on installing the S8500 Media Server in the rack and reconnecting all the cables.

Preparing the failed media server for shipment

Installing the new hard drive in the failed media server

1. Insert the new hard drive from the replacement media server into the drive cage so that the connectors are in the same direction as the CD-ROM connectors and the screws holes are aligned.
2. Reinsert the four screws (two on each side) to attach the hard drive to the drive cage.
3. Reattach the flat ribbon cable (in two places) to the hard drive and CD-ROM drive.
4. Reattach the two power cables to the hard drive and CD-ROM drive.
5. Slide the drive cage into place making sure that it fits securely into the retaining hooks and finger-tighten the captive screw.
6. Make sure the drive cage is secure and that the cables are not bunched or blocking the fan unit.

CAUTION:
Be sure the ribbon cable is pushed completely inside the media server and is not bunched, pinched, or caught between the top of the hard drive and the hard drive slot.

Replacing the cover on the failed media server

For these steps, see Figure 2, Removing and replacing the cover on the S8500 Media Server, on page 13.

1. Place the cover onto the media server.
2. Slide the cover forward so the covers' tabs slide into place under the top slots of the front panel.
3. Finger-tighten the captive screws on the back of the server.
4. Return to Avaya using standard return procedures.

Expanded Procedures

Powering down the media server manually

This section contains procedures for shutting down the media server manually.

If you cannot access the Maintenance Web Interface, you may shut down the media server by following manual steps with the shutdown button:

- On the front of the S8500 Media Server, press the power button to shut off the media server.

CAUTION:
Do not unplug a functioning server without stopping all processes first. Failure to do this will corrupt the hard drive.

CAUTION:
Do not hold down the power button for more than a split second. Holding the button down too long causes a reboot of the media server.

Installing the software

NOTE:
Use a telnet session to access the information on the CD.

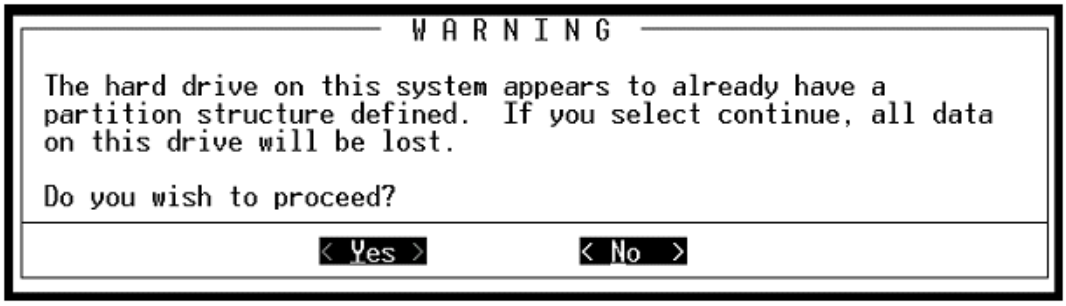
1 Type **telnet 192.11.13.6** and press **Enter** to view the first screen.

What do you want to do?
The hard drive is currently Partitioned
Choose One
(X) Install Install or Upgrade MV Software
( ) Shell Boot to Rescue Bash Shell
( ) Quit Reboot the server
< OK >

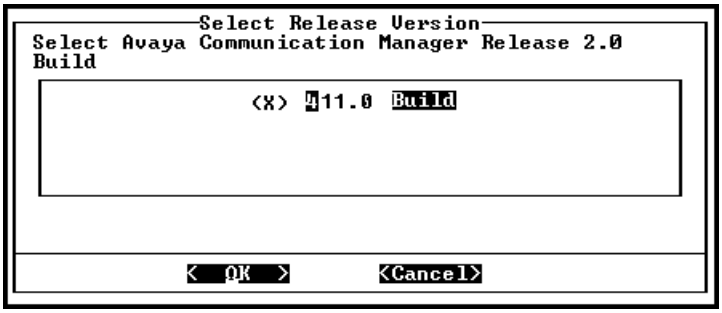
NOTE:
To navigate on these screens, use the arrow keys to move to an option, then press the space bar to select the option. Press **Enter** to submit the screen.

2 Select **Install**, make sure **<OK>** is highlighted, and press **Enter**.

The following screen is optional; it only shows if there is something on the hard drive.

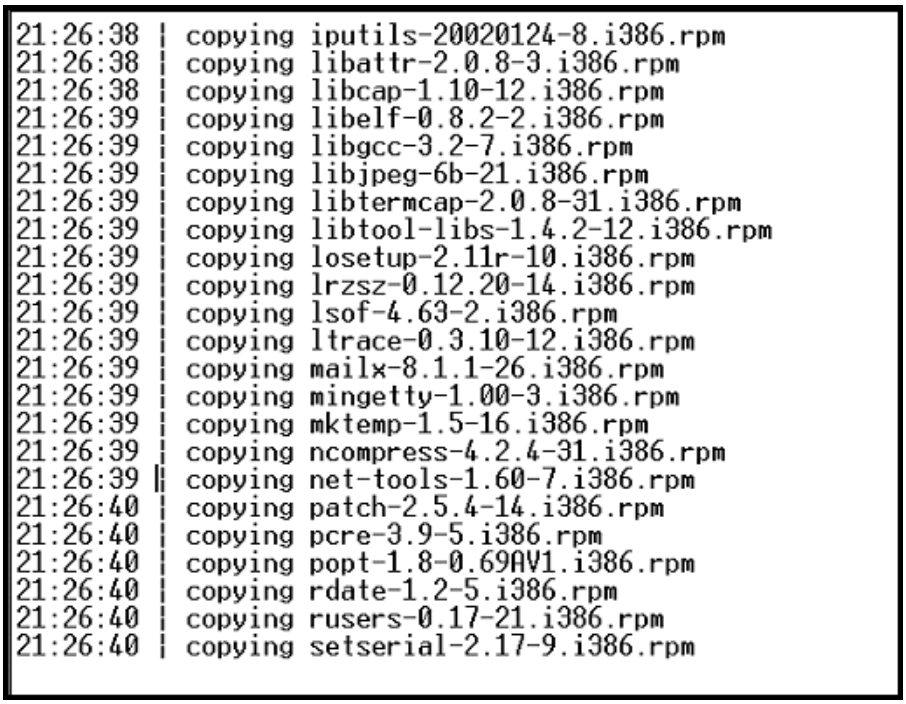

WARNING
The hard drive on this system appears to already have a partition structure defined. If you select continue, all data on this drive will be lost.
Do you wish to proceed?
< Yes >
< No >

3 Select **<Yes>** and press **Enter**.



4 Select **<OK>** and press **Enter** to partition the hard drive and reformat the partitions.

The program begins the installation process and reports the progress.


21:26:38 | copying iputils-20020124-8.i386.rpm
21:26:38 | copying libattr-2.0.8-3.i386.rpm
21:26:38 | copying libcap-1.10-12.i386.rpm
21:26:39 | copying libelf-0.8.2-2.i386.rpm
21:26:39 | copying libgcc-3.2-7.i386.rpm
21:26:39 | copying libjpeg-6b-21.i386.rpm
21:26:39 | copying libtermcap-2.0.8-31.i386.rpm
21:26:39 | copying libtool-libs-1.4.2-12.i386.rpm
21:26:39 | copying losetup-2.11r-10.i386.rpm
21:26:39 | copying lrzsz-0.12.20-14.i386.rpm
21:26:39 | copying lsof-4.63-2.i386.rpm
21:26:39 | copying ltrace-0.3.10-12.i386.rpm
21:26:39 | copying mailx-8.1.1-26.i386.rpm
21:26:39 | copying mingetty-1.00-3.i386.rpm
21:26:39 | copying mktemp-1.5-16.i386.rpm
21:26:39 | copying ncompress-4.2.4-31.i386.rpm
21:26:39 | copying net-tools-1.60-7.i386.rpm
21:26:40 | copying patch-2.5.4-14.i386.rpm
21:26:40 | copying pcre-3.9-5.i386.rpm
21:26:40 | copying popt-1.8-0.69AV1.i386.rpm
21:26:40 | copying rdate-1.2-5.i386.rpm
21:26:40 | copying rusers-0.17-21.i386.rpm
21:26:40 | copying setserial-2.17-9.i386.rpm

These processes can take up to 20 minutes. When the media server is ready to reboot, the CD-ROM drive drawer opens. You can remove the CD from the drive at this time.

The following screen appears for about 5 seconds.

The reboot may take up to 3 minutes. The telnet session drops automatically.

Installing post-upgrade update (patch) files (if any)

> **NOTE:**
> Skip this procedure if there is no Communication Manager software update (patch) file to install.
>
> This software update (patch) may or may not be call preserving.

Use the browser to load the necessary updates (patches).

1. Open a browser on your laptop.
2. In the **Address** field, type http://avaya.support.com and press **Enter**.
3. Under the Technical Database listing (on the left side), click **Communications Systems**.
4. Under Communications Systems, scroll down and click **S8500 Media Server**.
5. Click on the software release loaded on the media server.
6. In the Software Downloads section, click on the desired software release.

   A new window appears with a description of available updates and links to download them.

Now use a telnet session to install the software update (patch).

1. Click **Start** > **Run** to open the ***Run*** dialog box.
2. Type **`telnet 192.11.13.6`** and press **Enter**.
3. Log in as **craft**.
4. Type **`cd /var/home/ftp/pub`** and press **Enter** to access the pub directory.
5. At the prompt, type **`ls -ltr`** and press **Enter** to list files in the pub directory.

   The media server displays a list of files in the FTP directory. Verify that the directory contains the Communication Manager .tar.gz file you have uploaded.
6. Type **`sudo update_unpack`** and press **Enter**.

   The system lists all updates.
7. Type **`update_show`** and press **Enter** to list Communication Manager files to verify the new software update (patch) file was unpacked.
8. Type **`sudo update_activate`** ***`update`***, where ***`update`*** is the release or issue number of the latest software update (patch) file. (For example, **`00.0.219.0-xxxx`**. Do *not* use the .tar.gz extension at the end of the file name). Press **Enter**.

   The media server may reboot (reset system 4). If it reboots, it also may display the message

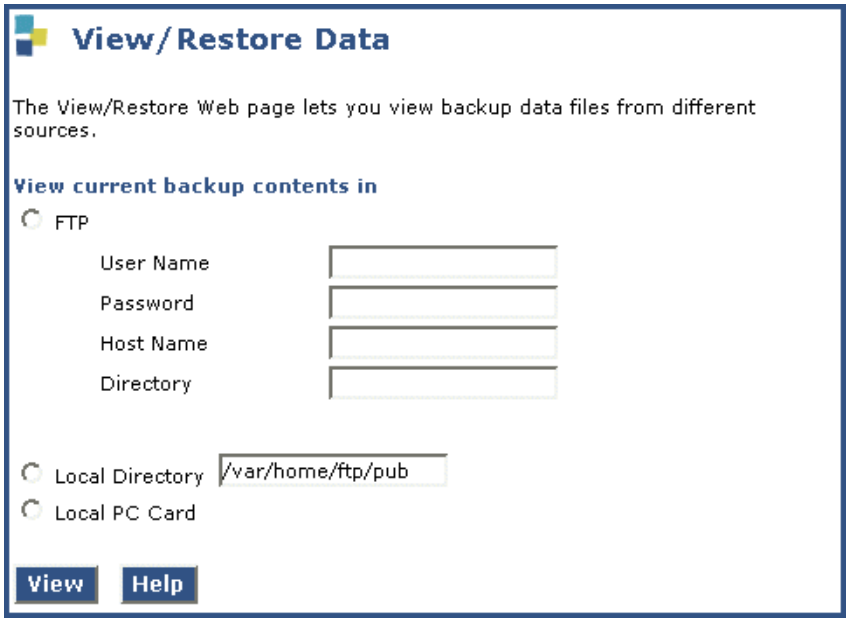
   `/opt/ecs/sbin/drestart 2 4 command failed`.

   Ignore this message. You must wait until the restart/reset completes before entering additional commands.

   The media server displays a message that the software update (patch) was applied.
9. Type **`update_show`** again and press **Enter** to verify the new software update (patch) file was activated.
10. Type **exit** and press **Enter** to close the Telnet session.

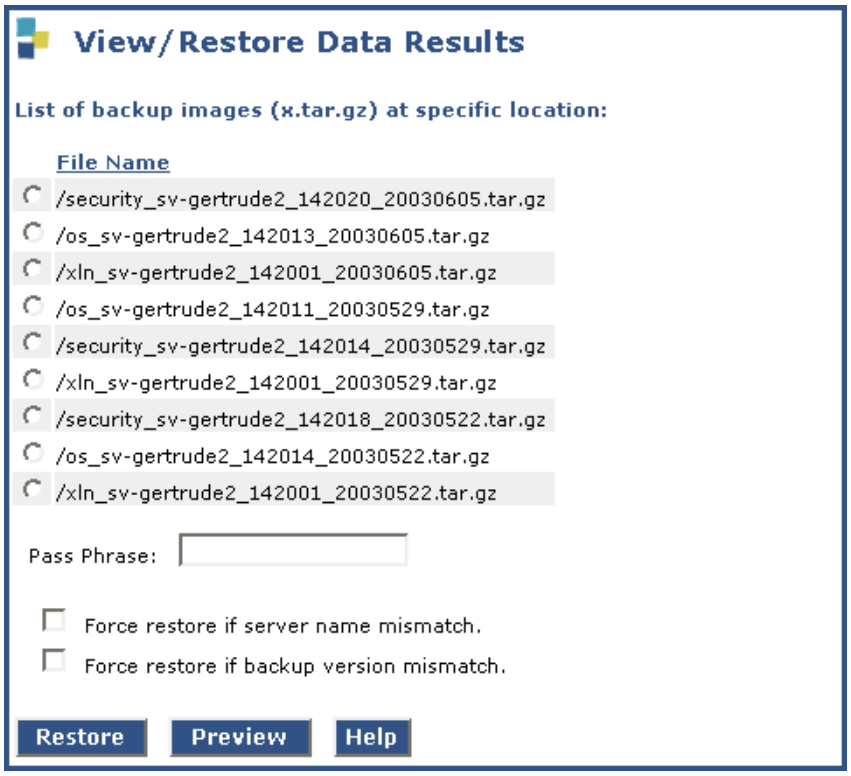
Restoring the system files

1 Under Data Backup/Restore, click **View/Restore Data**.



2 Select FTP and fill in the **User Name**, **Password**, **Host Name** (***must use the host IP address***), and **Directory** fields where the files were backed up.

3 Click **View**.



4 Select the correct file (the most recent is at the top) and click **Restore**.

5 Click **Status** to view the Restore status. When the restoration is complete, the message `Restore is finished` displays.

Verify media server configuration

1 Under Server Configuration, click **Configure Server** to start the configure server process.

2 Click **Continue** through the Review Notices to get to the Select Method for Configuring Server page.

3 Select "Configure all services using the wizard."

4 Click **Continue** through all the screens to verify that the configuration is complete and correct.

NOTE:
You may need to reset the port speeds for the Ethernet interfaces.

NOTE:
You do not need to fill in the static routes for Release 2.0 and later.

5 When you click through all the pages, click **Continue** on the Update System screen. The Update System screen displays each configuration task as it completes.

When done, the screen displays "All configuration information was entered."

6 Click **Close Window** to close the Configure Server wizard.